

6. REFERENCE LIST

- Bednarycyk, B. A. & Arnold, S. M., 2003. Micromechanics-Based Modeling of Woven Polymer Matrix Composites. *AIAA Journal*, 41(9), pp. 1788-1796.
- Bilisik, K., 2012. Multiaxis three-dimensional weaving for composites: A review. *Textile Research Journal*.
- Chahat, N. et al., 2017. Deep Space Network Telecommunication CubeSat Antenna: Using the deployable Ka-band mesh reflector antenna. *IEEE Antennas and Propagation Magazine*, pp. 1-1.
- Cox, B. N., Carter, W. C. & Fleck, N. A., 1994. A binary model of textile composites-I: formulation.
- Ferreira, A. D. B. L, Novoa, P. R. O, and Marques, A. T, 2016. Multifunctional MAterial Systems: A state-of-the-art review. *Composite Structures* 151, pp. 3-35.
- Foust, J., n.d. *Space news.com*. [Online] Available at: <https://spacenews.com/nasa-investigating-issue-with-lucy-solar-array/> [Accessed 10 June 2022].
- Gao, J. et al., 2019. A multi-scale method for predicting ABD stiffness matrix of single-ply weave-reinforced composite. *Composite Structures*, September.230(111478).
- Gibson, R. F., 2016. *Principles of Composite*. 4 ed. s.l.:s.n.
- Grumman, N., n.d. *Northropgrumman.com*. [Online] Available at: <https://www.northropgrumman.com/space-old/astro-aerospace-products-telescopic-tube-masts/>
- Hamillage, M. Y., Kwok, K. & Fernandez, J. M., 2019. *Micromechanical Modelling of High-Strain Thin-Ply Composites*. s.l., s.n.
- Hamillage, M. Y. & Mallikarachchi, H. M. Y. C., 2017. *Predicting non-linear bending behaviour of thin woven fibre composites*. s.l., s.n.
- Herath, S. & Mallikarachchi, C., 2016. Modified Ply Thickness for Classical Lamination Theory for Thin Woven Fibre Composites.
- Ichihashi, H., Hamada, H., lkuta, N. & Maekawa, Z., 1994. *Finite element analysis of woven fabric composites considering interfacial properties*. Japan, s.n.
- Jayasekara, M., 2020. *Non-linear Bending Behaviour of Thin Woven Fibre Composites Under High Curvatures*, s.l.: University of Moratuwa.
- Johnson, Todd, 2018. *History of Composites*. s.l.:s.n.
- Jones, R. M., 1998. *Mechanics of composite materials*. 2 ed. Philadelphia: PA:CRC Press.

- Karkkainen, R. L. & Sankar, B. V., 2006. A direct micromechanics method for analysis of failure initiation of plain weave textile composites. *Composites Science and Technology*, 66(1), pp. 137-150.
- Kueh, A. & Pellegrino, S., 2007. *ABD Matrix of Single-Ply Triaxial Weave Fabric*. s.l., s.n.
- Kwok, K. & Pellegrino, S., 2016. Micromechanics Models for Viscoelastic Plain-Weave Composite Tape Springs. *AIAA Journal*, October, 55(1), pp. 309-321.
- Mallikarachchi, C. & Pellegrino, S., 2011. *Design and validation of thin-walled composite deployable booms with tape-spring hinges*. s.l., s.n.
- Mallikarachchi, H. M. Y. C., 2011. *Thin-Walled Composite Deployable Booms with Tape-Spring Hinges*. s.l.: s.n.
- Mallikarachchi, H. M. Y. C., 2019. Predicting mechanical properties of thin woven carbon fiber reinforced laminates. *Thin-Walled Structures* 135, pp. 297-305.
- Mallikarachchi, H. M. Y. C. & Pellegrino, S., 2008. *Simulation of quasi-static folding and deployment of ultra-thin composite structures*. s.l., s.n.
- Mallikarachchi, H. M. Y. C. & Pellegrino, S., 2013. Failure criterion for two-ply plain weave CFRP laminates. *Journal of Composite Materials*, May, 47(11), pp. 1357-1375.
- Mao, J. et al., 2013. A Modeling Approach Across Length Scales for Progressive Failure Analysis of Woven Composites. *Applied Composite Materials*, June, Volume 20, pp. 213-231.
- Múgica, J. I. et al., 2019. Multiscale modelling of thermoplastic woven fabric composites: From micromechanics to meso mechanics. *Composite Structures*, 20 August.
- Nadarajah, S., Jayasekara, M. & Mallikarachchi, C., 2019. *Nonlinear Bending Response of Two-Ply Plain Woven Carbon Fibre Composites*. s.l., s.n., pp. 147-151.
- Nishangani, G., 2021. *Influence of relative positioning of tows on mechanical properties of thin woven composites*, s.l.: s.n.
- Nishangani, G., Jayasekara, M., Mallikarachchi, C. & Herath, S., 2022. Effects of tow arrangements on homogenized response of carbon fiber woven composites. *Composite Structures*, 15 November. Volume 300.
- Sakovskiy, M., Pellegrino, S. & Mallikarachchi, H. M. Y. C., 2016. *Folding and Deployment of Closed Cross-Section Dual-Matrix Composite Booms*. San Diego, California, USA, s.n.
- Sanford, G., Biskner, A. & Murphey, T., 2010. *Large Strain Behavior of Thin Unidirectional Composite Flexures*. s.l., s.n.

- Soykasap, O., 2006. Micromechanical models for bending behavior of woven composites,. *Journal of Spacecraft and Rockets*,, 43(5), pp. 1093-1100.
- Soykasap, O., Pellegrino, S., Howard, P. & Notter, M., 2008. Folding Large Antenna Tape Spring. *Journal of Spacecraft and Rockets*, 45(3), pp. 560-567.
- Soykasap, O., Watt, A. M. & Pellegrino, S., 2004. *New Deployable Reflector Concept*. s.l., s.n.
- Swetha Lakshmi, S. et al., 2022. *Thermo-structural analysis of deployable composite booms with slotted hinges for space applications*. s.l., s.n., pp. 3564-3570.
- TexGen, 2018. *User Guide v3.10*, s.l.: University of Nottingham Textile Composites Research, Nottingham.
- Thomson, S., 1999. *The AstroMesh Deployable Reflector*. s.l., s.n., pp. 1516-1519.
- Twfik, B., Leheta, H., Elhewy, A. & Elsayed, T., 2016. Weight Reduction and strengthening of marine hatch covers by using composite materials. *International Journal of Naval Architecture and ocean Engineering* 9(2).
- Ubamanyu, K. & Mallikarachchi, H. M. Y. C., 2016. *Simulation of dual-matrix composite boom*. s.l., s.n.
- Weerasinghe, U., 2022. *Homogenization of Ultra Thin Woven Composite Structure at High curvatures*, s.l.: s.n.
- Wijesuriya, H., Deemantha, C., Nadarajah, S. & Mallikarachchi, C., 2018. *Predicting bending behaviour of deployable booms made of thin woven fibre composites*. s.l., s.n.
- Woo, K. & Suh, Y. W., 2001. Low degree of homogeneity due to phase shift for woven textile composites. *Comps Sci Technol*, 23(4).
- Woo, K. & W., S. Y., 2001. Low degree of homogeneity due to phase shift for woven textile composites. *Compos Sci Technol*, 23(4).
- Yee, J. C. H. & Pellegrino, S., 2005. Folding of Woven Composite Structures. *Composites/A*, 36(2), pp. 273-278.